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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,687

10/20/2005

Asher Bartov

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8791

7590

05/12/2008

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EXAMINER

XAVIER, VALENTINA

ART UNIT

PAPER NUMBER

3644

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/521,687	<b>Applicant(s)</b> BARTOV, ASHER	
	<b>Examiner</b> VALENTINA XAVIER	<b>Art Unit</b> 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 33-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/26/07, 03/31/2008</u> .                                    | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Even though Applicant states "the tachometer/position sensor may simply be a tachometer or a position sensor," Applicant has not disclosed a position sensor alone.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 33 – 35 recite the limitation "said tachometer/position sensor" in line 11. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1 and 33 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macgregor (US 3,674,049) in view of Coutant et al (US 5,561,979), Wannasuphoprasit et al (US 6,241,462).**

Macgregor '049 discloses a refueling system comprising a hose reel (6), said hose having an outlet end and a drogue (20) affixed to said outlet end (See Fig. 1), and a hose reel drive system comprising a hydraulic motor (fuelhydraulic motor 22) having an electric controller, control valve (16) and having an output shaft (See Fig. 2) connected to said reel.

Macgregor '049 discloses a fixed displacement hydraulic motor as opposed to a variable displacement hydraulic motor. However, Coutant et al discloses a control arrangement for a hydrostatic system having a variable displacement hydraulic motor (Col. 1; Lines 5 – 10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the fixed displacement hydraulic motor with the variable displacement hydraulic motor as taught by Coutant et al '979 for the well-known advantage of versatility and motor efficiency with respect to torque vs. speed. It is well

known in the art that variable displacement hydraulic motors will operate at high efficiency for all load conditions while the hydraulic flow requirements can be significantly reduced.

Macgregor '049 as modified by Coutant et al '979 discloses a microprocessor (Col. 1; Lines 59 – 64 of Coutant et al) connected to a control valve.

Although Macgregor as modified by Coutant et al '979 fails to disclose the motor using a electro-hydraulic (EH) control valve, Examiner takes Official Notice that EH valves are very well known in the art and it would be within the skill of one having ordinary skill in the art at the time the invention was made to use an EH control valve for the well known advantage of reliability and a further refined control system in comparison to a mechanical servo mechanism.

Macgregor '049 fails to disclose a position sensor being positioned to detect the movement of the hose. However, Examiner takes Official Notice that the use of position sensors is well known and it would have been well within the knowledge of one having ordinary skill in the art to use a position sensor to detect the movement of the hose for the well known advantage of accuracy.

Macgregor '049 fails to disclose a torque sensor measuring the torque imposed on the reel. However, Wannasuphoprasit et al '462 discloses the use of a reel torque sensor on a suspended cable (Col. 15; lines 17 – 44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the torque sensor taught by Wannasuphoprasit et al '462 to measure the torque of the reel in Macgregor '049 for the well known advantage of preventing overload on the reel.

Although Macgregor '049 as modified with the microprocessor of Coutant et al '979 fails to disclose the microprocessor being electronically connected to said electro-hydraulic control valve, said reaction torque sensor and said tachometer/position sensor, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include an electronic connection between the microprocessor and the EH control valve, torque sensor and position sensor, in order to accurately and efficiently operate the refueling system.

**With regard to claims 33 – 35:**

Given the structure provided by the combination provided in the discussion of claim 1 above, the functions recited in claims 33 to 35 would be capable of being performed using the aerial refueling system discussed above.

***Response to Arguments***

Applicant's arguments, see Remarks, filed 2/8/2008, with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Coutant et al '979.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VALENTINA XAVIER whose telephone number is (571)272-9853. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on (571)272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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VX